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Substitute for form 1448A/B/PTO				Complete If Known	
				Application Number	10/672,888-Conf. #9563
				Filing Date	September 26, 2003
				First Named Inventor	William T. Townsend
				Art Unit	3652
				Examiner Name	D. J. Kramer
Sheet	1	of	2	Attorney Docket Number	57493(47798)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		
DK	AA*	US-4,779,031	10-18-1988	Arends et al.	
DK	AB*	US-5,159,218	10-27-1992	Murry et al.	
DK	AC*	US-5,309,349	05-03-1994	Kwan	
DK	AD*	US-5,912,541	06-15-1999	Bigler et al.	
DK	AE*	US-6,049,474	04-11-2000	Platnic	
DK	AF*	US-4,973,769 4,937,757	06-26-1990	Vold	
DK	AG*	US-4,975,856	12-04-1990	Vold et al.	
DK	AH*	US-5,155,423	10-13-1992	Karlen et al.	
	AI*	US-5,967,560	10-19-1999	Roschein	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>2</sup> Number-Kind Code <sup>3</sup> (if known)	MM-DD-YYYY		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(e)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. \* Applicant's unique citation designation number (optional). \* See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. \* Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \* Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \* Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
DK	CA	Michael Puttre, "Space-age Robots Come Down To Earth," <i>Mechanical Engineering</i> , pp. 88-89 (January 1995).			
	CB	Advertisement, Barrett Hand, <i>IEEE Robotics &amp; Automation Magazine</i> , (March 1994).			
	CC	Barrett Technology, Inc., BH8-250 BarrettHand Information Sheets (2 pages).			
	CD	Barrett Technology Inc., BarrettHand BH8-200 Electrical Interface Specifications			
	CE	CPU Board and Motor Board Component Size Specification Sheets for Barrett Hand (1993).			
	CF	Barrett Technology, Inc, Final Report, Contract NAS9-18642, "Design of an Integrated Arm/Wrist/Hand System for Whole-Arm Manipulation," pp. 1, 23, 24, 28 and 29, (June 1, 1994).			
	CG	Barrett Technology Inc., "Tiny Motor Provides High Precision," <i>Mechanical Engineering</i> , p. 36, (April 1995).			
	CH	Adept Technology, Inc., Specification Sheets for Adept FireBlox-1™ Control Module, (4 pages), and Adept FireBlox-1™ Ordering Information (1 page).			
	CI	Texas Instruments Europe, "Three Phase Current Measurements Using a Single Line Resistor on the TMS320F240," Literature Number BPRA077 (May 1998).			
	CJ	Robotics Research Corporation, "Dexterous Manipulators and Advanced Control Systems," (7 pages); Website: <a href="http://www.robots-research.com/">http://www.robots-research.com/</a>			
↓	CK	Amtec GmbH, "PowerCube: Rotary and Linear Actuators, Robotic Components, Handling Systems." Website: <a href="http://www.amtec-robotics.com/">http://www.amtec-robotics.com/</a>			
	CL	J.T. Boys, "Novel Current Sensor for PWM AC Drives," <i>IEE Proceedings</i> , Vol. 135, Pt. B, No.			
Examiner Signature	/Dean Kramer/			Date Considered	05/25/2006